Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

A 281.9
R313A
43-83
Cop-1

U.S. DEPARTMENT OF AGRICULTURE
LIBRARY
JUN 1 1959
BELTSVILLE BRANCH

FOR RELEASE
Oct. 7, A. M.

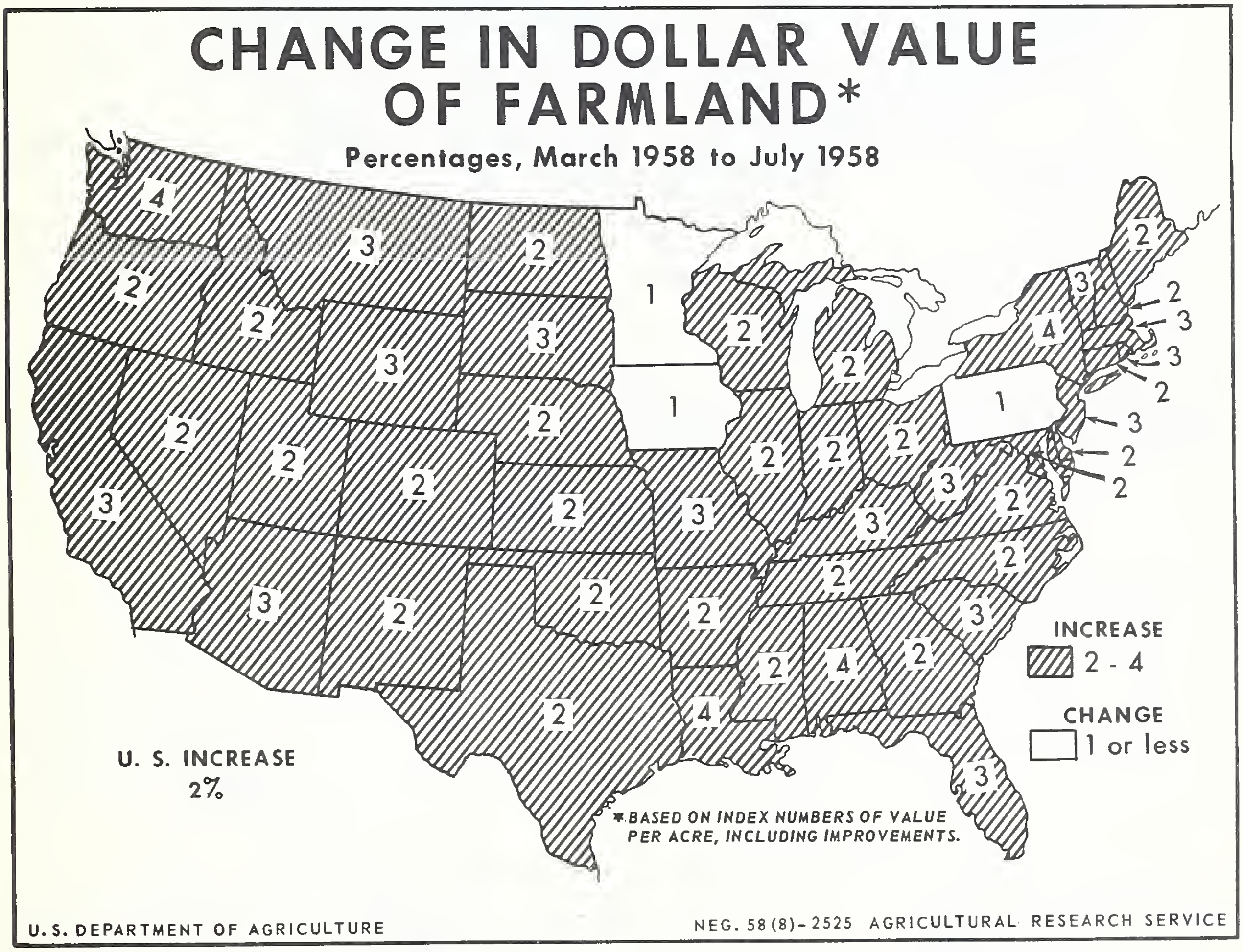
Current Developments in

THE FARM REAL ESTATE MARKET

March - July 1958

Agricultural Research Service
UNITED STATES DEPARTMENT OF AGRICULTURE

ARS 43-83 (CD-50) October 1958



CHANGE IN DOLLAR VALUE OF FARMLAND*

Percentages, March 1958 to July 1958

*BASED ON INDEX NUMBERS OF VALUE PER ACRE, INCLUDING IMPROVEMENTS.

U.S. DEPARTMENT OF AGRICULTURE NEG. 58(8)-2525 AGRICULTURAL RESEARCH SERVICE

Farm real estate values advanced 2 percent or more in 45 States in the 4 months ended July 1, 1958. Increases exceeded 3 percent in 4 States, and remained essentially unchanged in 3 others. At mid-1958, values were at record high levels in 45 States. The national index of value per acre advanced 2 percent to reach 159 percent of the 1947-49 average value. This was 5 percent above the July 1, 1957 index and a record high.

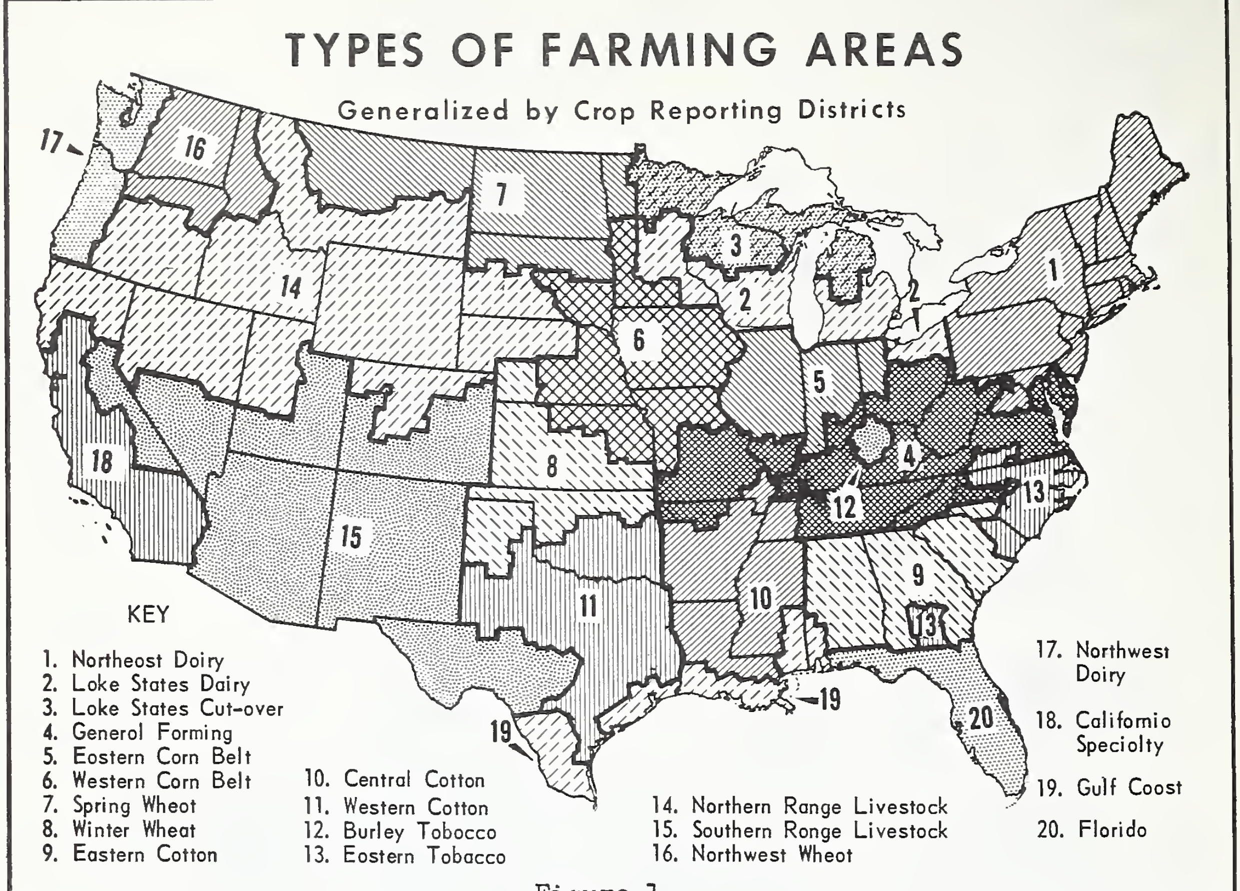


Figure 1

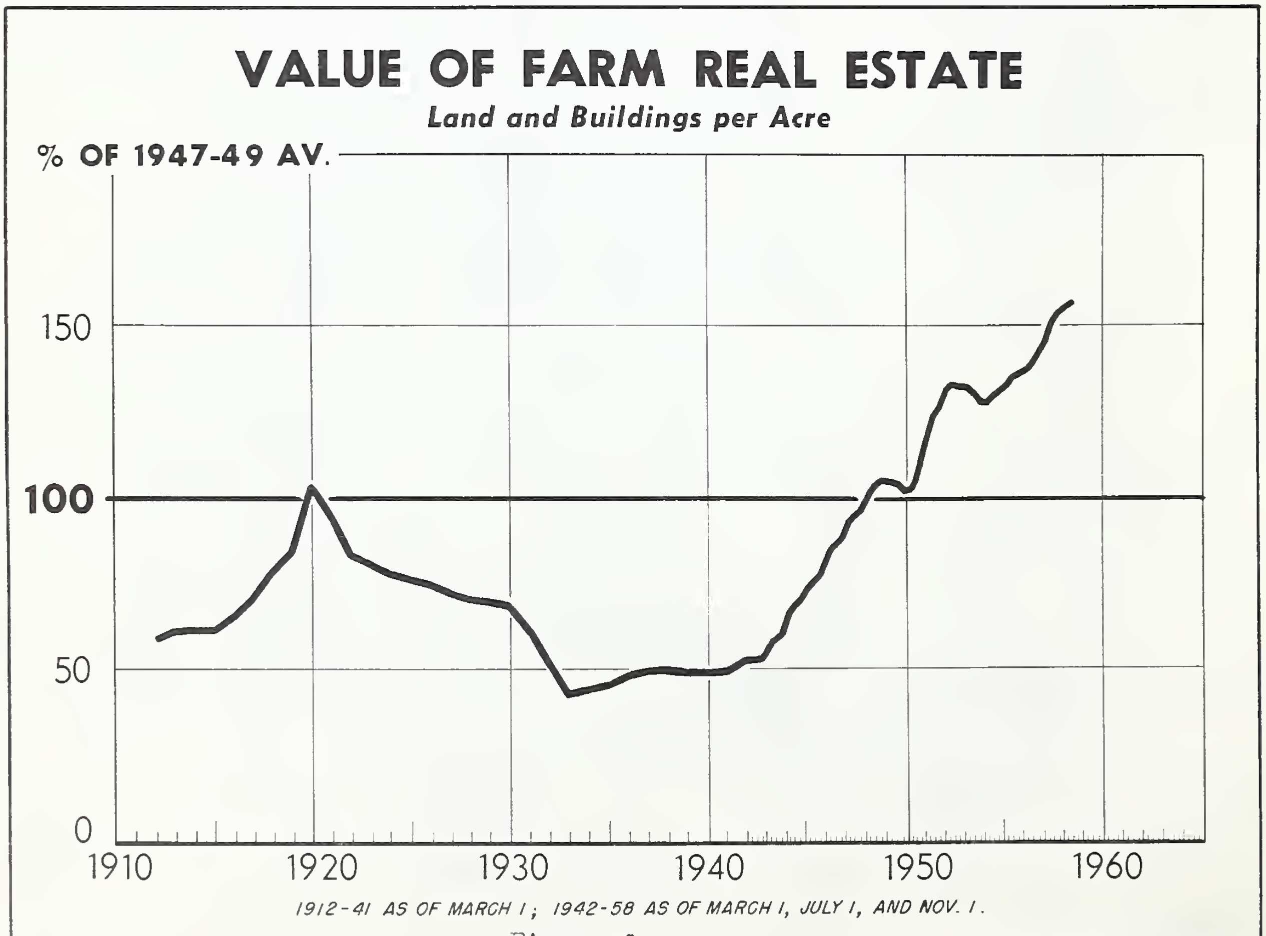


Figure 2

CURRENT DEVELOPMENTS IN THE FARM REAL ESTATE MARKET

March - July 1958

Approved by the Outlook and Situation Board, September 26, 1958

SUMMARY

The market value of farm real estate increased 2 percent or more in 45 States in the 4 months ended July 1, 1958. Values were essentially unchanged in Minnesota, Iowa, and Pennsylvania. The national index of average value per acre advanced 2 percent to a record high level of 159 (1947-49=100) as of July 1. In terms of the 1912-14 average, the index was 268. In 45 States, values reached record high levels. The total value of farm real estate (land and buildings) was estimated at $118.7 billion.

Between July 1957 and July 1958, market values advanced 5 percent, a little less than in recent comparable 12-month periods. The sharpest advances in the last year occurred in the Southeastern and Northern Plains regions. The smallest increases occurred in the Corn Belt and Lake States.

Active farmers continued to be the most important buyers of farmland. They bought about three-fifths of the farms and tracts of farmland sold in the 12 months ended March 1, 1958. This was about the same proportion as in the previous year. However, active farmers made fewer sales of farmland during 1957-58 than during the previous year.

Purchases of farmland for enlargement of existing farms increased during the year; they accounted for 40 percent of all transfers. Although the relative importance of these purchases varies by areas, market demand and prices have been strengthened throughout the Nation as a result of this demand. Most strongly affected was the western two-thirds of the country, notably the spring and winter wheat areas, where nearly two-thirds of the farmland purchases are for farm enlargement.

Although minor changes occurred among regions, the percentage of all purchases of farmland in 1957-58 that were credit-financed was 67 percent, the same as a year earlier. The amount borrowed as a percentage of the purchase price increased slightly from 63 to 64 percent. Nationally, sellers (chiefly individuals) continued to be the most important source of new credit to finance the purchase of farmland. Commercial banks were the second most important source, followed, in order of importance, by insurance companies, Federal land banks, individuals other than the seller, and combinations of the above.

Approximately a fifth of the farm properties sold in the fall and winter of 1957-58 were on dirt roads. Farm real estate reporters estimated that the sales prices of the properties would have been from 3 to 11 percent higher, depending upon the area, if they had been on gravel roads. Comparable premiums estimated for hard-surfaced roads ranged from 7 to 32 percent.

About 40 percent of the farms sold were on gravel roads. If these properties had been on hard-surfaced roads, reporters estimated that the sales prices would have been about 5 percent higher.

CURRENT MARKET DEVELOPMENTS

The market value of farm real estate continued to increase during the spring and early summer of 1958, reaching another record high level by July 1. The index of average value per acre in mid-1958 was 159 percent of the 1947-49 average, and 2 percent above the level 4 months earlier (table 1).

This is the 13th consecutive 4-month period in which the index has recorded an increase. This upward movement of land prices during the last 52 months continued a long-term trend that began in 1933, when farm real estate values began to recover from the depression lows (fig. 1). Although the upward trend was interrupted in 1938-39, the first reversal occurred in 1949 when values declined by approximately 3 percent. This loss was quickly recovered in the first 6 months of 1950, and values continued to increase until mid-1952, when the upward trend was once again reversed. By late 1953, values had declined by 4 percent. In early 1954, the upward trend again became evident. By mid-1958, values were nearly 3-1/4 times higher than the 1933 low, and more than 50 percent above the post-World War I peak in 1920.

Values Increase an Average of 2 percent from March to July 1958

The estimated market value of farmland per acre increased 2 percent or more in 45 States during the spring and early summer of 1958. These additional gains raised the index of average values per acre to new record high levels in 45 States by mid-1958. In many of these States, this was the 11th consecutive 4-month period in which the previous record highs were surpassed. However, for the first time, values in Kentucky this July exceeded the previous peak established in July 1952, while values in Colorado, which had not fully recovered from the drought of 2 and 3 years ago, remained slightly below the 1952 peak. In the March to July 1958 period, increases of 2 to 3 percent occurred generally throughout the Nation. Values were 4 percent higher only in New York, Alabama, Louisiana, and Washington. In Minnesota, Iowa and Pennsylvania, values remained about the same as March 1.

Table 1.- Farm real estate: Index numbers of average value per acre, United States, 1912-58 1/

Year	Index 1912-14 = 100	Index 1947-49 = 100	Year	Index 1912-14 = 100	Index 1947-49 = 100	Year	Index 1912-14 = 100	Index 1947-49 = 100
	Percent	Percent		Percent	Percent		Percent	Percent
1912	97	57.7	1943:			1952:		
1913	100	59.5	March	98	58.3	March	221	131.5
1914	103	61.2	July	100	59.4	July	223	132.6
1915	103	61.1	Nov.	103	61.4	Nov.	222	132.3
1916	110	65.1	1944:			1953:		
1917	118	70.3	March	113	66.9	March	221	131.5
1918	130	77.5	July	116	68.7	July	218	129.9
1919	142	84.5	Nov.	118	69.9	Nov.	215	127.7
			1945:			1954:		
1920	173	102.8	March	124	74.0	March	216	128.4
1921	160	95.3	July	128	76.2	July	218	129.5
1922	140	83.5	Nov.	131	77.9	Nov.	221	131.5
1923	136	80.9	1946:			1955:		
1924	131	77.7	March	141	83.7	March	224	133.1
1925	128	76.1	July	145	86.5	July	228	135.6
1926	125	74.2	Nov.	150	89.1	Nov.	231	137.5
1927	120	71.1	1947:			1956:		
1928	117	69.9	March	157	93.6	March	232	137.9
1929	116	69.2	July	160	95.3	July	236	140.4
			Nov.	163	96.7	Nov.	241	143.4
1930	114	68.0	1948:			1957:		
1931	103	61.2	March	170	101.2	March	247	147.0
1932	86	51.2	July	175	103.8	July	253	150.6
1933	70	41.9	Nov.	178	105.6	Nov.	258	153.5
1934	74	43.9	1949:			1958:		
1935	77	45.5	March	177	105.2	March	262	155.9
1936	80	47.5	July	174	103.6	July	268	159.2
1937	83	49.3	Nov.	172	102.1			
1938	84	49.7	1950:					
1939	82	48.7	March	174	103.3			
			July	178	105.6			
1940	82	48.7	Nov.	186	110.5			
1941	83	49.2	1951:					
1942:			March	200	119.1			
March	89	53.2	July	209	124.3			
July	89	53.2	Nov.	214	127.1			
Nov.	91	54.4						

1/ Farmland and buildings as of March 1, except as indicated.

Values Increase 5 Percent in 12 Months

Between July 1957 and July 1958, market values of farm real estate advanced 5 percent, a little less than in recent comparable 12-month periods. The sharpest advances occurred in the Southeastern and Northern Plains regions (table 2). However, the 9-percent increase recorded for the Southeastern States was due largely to a 15-percent increase in values in Florida; values in the other States in the region increased by only 6 or 7 percent (fig. 3).

Larger increases were more general in the Northern Plains States; values increased 10 percent in Nebraska, 8 percent in both North and South Dakota, and 7 percent in Kansas. The smallest increases occurred in the Corn Belt and Lake States. Land values in these States recovered more quickly than in other parts of the country from the 1953 low. They have tended to level off in recent periods, while values elsewhere have recovered their previous losses. Also, this area of the Nation has been less affected by drought in recent years than many other regions and localities. Between July 1957 and July 1958, most of the remaining regions of the country recorded increases averaging 6 percent. Outside of the Corn Belt and Lake States, values increased by less than 5 percent in only 6 widely scattered States.

Principal Factors Affecting The Farm Real Estate Market At Mid-Year

Crop and income prospects contributed a note of optimism to the farm real estate market during the first half of 1958. On July 1, a record crop output appeared to be probable. Crop developments through June were

Table 2.- Percentage change in index of average value of farm real estate per acre, by farm production regions, selected periods, 1956-58

Farm production region	Change during year ending July			Change during 4 months endin July		
	1956	1957	1958	1956	1957	1958
	Percent	Percent	Percent	Percent	Percent	Percent
Northeast	+6	+8	+6	+2	+3	+3
Corn Belt	+4	+8	+4	+2	+3	+2
Lake States	+6	+9	+5	+2	+2	+2
Appalachian	+4	+7	+6	+2	+2	+3
Southeast	+9	+12	+9	+3	+4	+3
Delta States	+8	+8	+6	+3	+3	+2
Southern Plains	+1	+6	+6	+2	+1	+2
Northern Plains	-1	+5	+8	0	+3	+3
Mountain	+1	+4	+6	0	+3	+2
Pacific	+6	+9	+7	+1	+3	+3
United States	+3	+8	+5	+1	+3	+2

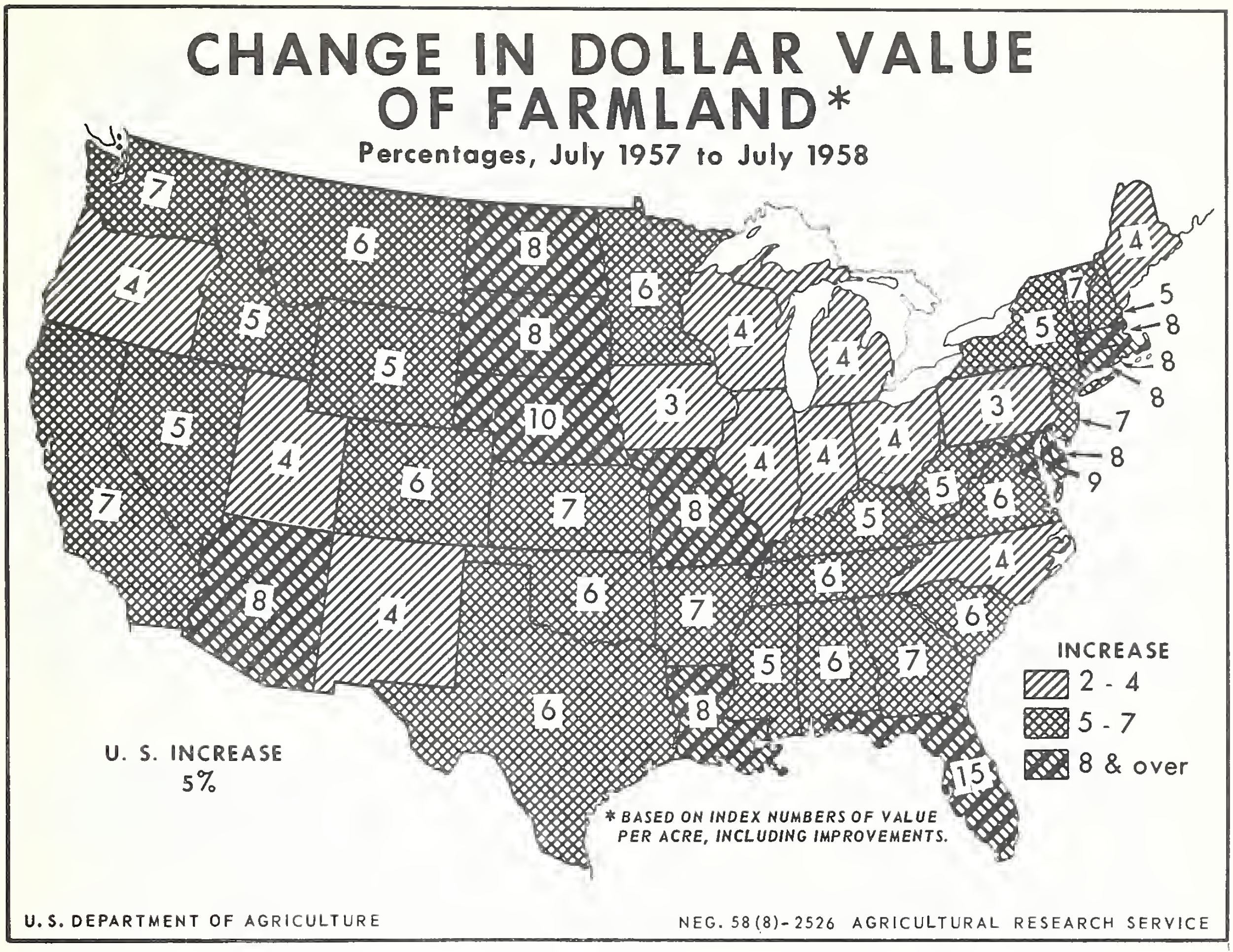

CHANGE IN DOLLAR VALUE OF FARMLAND*
Percentages, July 1957 to July 1958
INCREASE
2 - 4
5 - 7
8 & over
U. S. INCREASE 5%
* BASED ON INDEX NUMBERS OF VALUE PER ACRE, INCLUDING IMPROVEMENTS.
U.S. DEPARTMENT OF AGRICULTURE
NEG. 58(8)-2526 AGRICULTURAL RESEARCH SERVICE

Figure 3

generally favorable and yields were expected to exceed last year's record highs. Although crop prices were about the same as a year ago, prices for hogs, cattle, and eggs were higher. Farm product prices in general averaged 5 percent above a year earlier in mid-June and 8 percent higher than from January through June 1957. With the volume of marketings up 3 percent, cash receipts totaled 11 percent above the first half of 1957. Production expenses were also higher, but by less than 4 percent. Realized net income of farm operators in the first half of 1958 was 22 percent above the revised estimate for the first half of 1957.

The optimism generated by these favorable prospects complemented several more general underlying forces that contributed to the increase in market values during the first part of 1958. These forces included inflationary pressures, demand for land and buildings for nonfarm uses, Government programs for agriculture, and demand for land with which to enlarge existing farm units.

SALES OF FARM REAL ESTATE

Prices for a sample of sales of farmland made during the last part of 1957 and the first 2 months of 1958 were lower in 7 major type-of-farming areas and higher in 5 others. Changes in average price per acre were minor in 5 areas--Lake States dairy, spring wheat, winter wheat, western cotton, and southern range livestock--amounting to $3.00 or less per acre. Declines were most pronounced in the Northeast, general farming, eastern Corn Belt, and central cotton areas.

Variability of Sales Prices

Changes in the average price of land sold in an area may not indicate changes in the market value of all land. Because the annual number of sales seldom exceeds 3 or 4 percent of all farms, land sold often is not representative of all land as to quality, improvement, location, and other value-determining characteristics. Often demand is selective as to grade or quality and prices paid for some classes of land may be bid up more than for others. Normally, the market supply of the better land is more limited than the supply of the lower grades of land. Also, the range in sales prices extends farther above than below the average. Consequently, average sales prices for a county or larger area should be interpreted with caution, especially when they are used as a basis for pricing land to be sold or for appraising a particular farm for credit or tax purposes.

Arraying prices paid per acre for a sample of sales to determine the range from low to high, or expressing the range as a percentage of the average price for all sales are useful devices for determining the reliability of the average. Although one might expect the dollar range to be smallest in an area with a low average sales price, the range in prices relative to the average is usually greater there than in an area with a high average price.

In the eastern Corn Belt, an area with a high average price, the range is a third larger than the average, even when the highest and lowest 10 percent of prices are ignored. In the spring wheat area, where the average price is low, the range is nearly 1½ times larger than the average (table 3).

One determinant of the variation in sales prices is the quality of the land sold. Changes in the relative amounts of various qualities can produce changes in the average price of all land sold, even though the price for each quality may not change.

In the March 1, 1958, sample of sales, the distribution of land of different qualities sold was essentially unchanged from a year earlier. 1/

1/ Reporters rated the quality of the land and buildings separately for each property sold, using a scale of "good", "average", or "poor", and "none" in the case of buildings. These are subjective ratings in which each tract or farm is compared with the reporter's concept of a community or county norm. Because this norm varies among reporters, sales prices for a particular grade of land in one area should not be compared with the same grade in another. However, this grading system is useful for determining changes in the general quality of land sold in an area and for showing differences in the trend in average sales prices for each quality.

Table 3.- Farm real estate: Average price of farmland sold, range in prices, and average price by quality of land sold, selected type-of-farming areas, 1957-58 1/

Type-of-farming area	Number of sales	All Sales		Average price per acre		
		Average price per acre 2/	Range in prices 3/	Poor land	Average land	Good land
	Number	Dollars	Dollars	Dollars	Dollars	Dollars
Northeast dairy-------	514	151	41 - 478	99	140	180
Lake States dairy-----	744	148	50 - 329	69	123	195
General farming-------	991	94	29 - 300	39	95	132
Eastern Corn Belt-----	857	308	131 - 541	160	269	382
Western Corn Belt-----	1,787	168	66 - 330	96	147	220
Spring wheat----------	502	38	23 - 115	29	33	45
Winter wheat----------	507	99	45 - 225	56	84	130
Eastern cotton--------	292	88	30 - 184	47	65	106
Central cotton--------	317	86	29 - 247	74	101	169
Western cotton--------	401	91	40 - 200	63	80	127
				Grazing land	Dry farming land	Irrigated land
Northern range livestock------------	566	44	---	20	77	127
Southern range livestock------------	212	48	---	21	28	173

1/ Based on a sample of sales of farm property reported by farm real estate dealers and other reporters in a March 1958 survey. Most of the sales probably took place during the 6 months preceding the date of the survey.

2/ Total consideration divided by total acres sold.

3/ This range excludes the highest and lowest 10 percent of the sales. The price per acre for approximately 80 percent of all tracts of farmland sold was within the range indicated for each type-of-farming area.

Sales of good quality farmland made up approximately 38 percent of the total in the eastern farming areas; sales of "average" quality farmland accounted for 47 percent; and the rest of the land was classified as of "poor" quality. The distribution of sales by quality of land within areas varied around the combined distribution. The proportion classified as "good" ranged from a low of 30 percent in the central cotton area to 48 percent in the extreme northeast. The proportion of sales of average quality land was also highest, 55 percent, in the central Cotton area and lowest in the extreme northeast. Sales of poor land were least important in the Lake States dairy area, where they accounted for 10 percent of all sales, and most frequent in the tobacco and winter wheat areas.

Changes in the prices of land of different qualities are a second source of variation. They affect the average sale price of all tracts of farmland in an area. Prices of average quality land showed some decline in the northeastern quarter of the country. Elsewhere, increases were more general--the Winter Wheat area showed the only decline among the remaining six eastern areas. From 1954 to the early part of 1956, a general tendency for selling prices of farmland of good quality to show more strength than prices of land of lower quality was apparent. Although this tendency was arrested in several areas during the winter and spring of 1957, it is again apparent in the most recent sample of sales of farm real estate. The price of good quality land advanced in more areas than did the price of poor land. In addition, in several of the areas in which the price of good land increased, the price of poor land was reported to be lower. The spread between the price of good land and average land, approximately 50 percent, was greater this year. The differential between poor land and average quality land increased also, but by a lesser amount. Currently, the price of poor land is approximately 69 percent of the price of average land.

Type of Buyer Shows Little Change

Nationally, active farmers bought about the same proportion of total transfers in 1957-58 as in the previous year, accounting for about three-fifths of the total in both years. Regionally, however, they increased in relative importance in the Corn Belt, Mountain and Pacific regions but declined slightly in most other regions. About a third of the active farmer buyers were tenants and the rest owned and operated land before their current purchases. Compared with a year earlier, tenants declined in relative importance as buyers in the Southeast, but increased significantly in the Delta, Northern Plains, and Pacific regions.

Purchases by owner-operators increased in the Corn Belt and Mountain regions, declined in the Northeast and the Northern Plains, and remained about the same in the other regions. Retired farmers bought about 5 percent, of the total. They have shown a slight upward trend in relative importance in recent years (table 4). The proportion bought by nonfarmers has remained at about 35 percent of the total for the last 3 years. Regional differences continue to be pronounced; they range from about 17 percent of the total in the Northern Plains to about 48 percent in the Northeast and the Southeast. Little significant change occurred among regions between 1956-57 and 1957-58.

Nearly four-fifths of the farms and parcels of land sold in 1957-58 were bought by local residents, that is, by persons who lived in the same county in which the land was located or in an adjoining county. This was a slight increase from the previous year. Purchases by nonresidents tend to be most frequent in areas in which nonfarm influences are most prevalent, that is, the Northeast, Delta and Pacific regions, where they account for 30 percent or more of farmland purchases. They are of lesser importance in the remaining regions, particularly the Northern Plains and the Corn Belt, where local people buy 85 percent or more of the farmland sold.

Table 4.- Farm real estate transfers: Percentage distribution by type of buyer and seller, United States, years ending March 1, 1953-58 1/

Type of buyer or seller	1953	1954	1955	1956	1957	1958
	Percent	Percent	Percent	Percent	Percent	Percent
Buyer:						
Tenant	23.7	23.7	24.1	21.7	19.9	20.0
Owner-operator	38.3	38.1	38.7	37.9	39.9	39.8
Retired farmer	4.3	4.3	4.4	4.9	4.2	5.2
Non-farmer	33.7	33.9	32.8	35.5	35.9	35.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Seller:						
Active farmer	54.3	51.6	53.9	51.6	50.7	47.1
Retired farmer	14.4	15.0	15.8	17.0	18.2	19.7
Estate	15.5	16.4	14.9	16.1	15.3	17.0
Lending agency	.7	.7	.5	.5	.3	.5
County, State, or Federal government	.5	.4	.3	.6	.4	.5
Other	14.6	15.9	14.6	14.2	15.1	15.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

1/ Weighted by the estimated total number of transfers at the farm production region level.

Active Farmers Make Fewer Sales

Sales of farmland by active farmers were less frequent in the March 1958 sample than in the previous year. In the 1958 sample, they accounted for 47 percent of all sales compared with nearly 51 percent of the previous year. In all regions, active farmers made fewer sales during 1957-58. Nationally, retired farmers made more sales than a year earlier, although regional variations were apparent. Sales of farmland by estates increased during the last year also. This source of supply of farmland for sale represents a major part of the market in many areas of the country. For example, in the Northern Plains, slightly more than one-fourth of the sales were made by administrators and executors of estates. In the Corn Belt, sales by estates have amounted to more than one-fifth of the total for several years. Sales by nonfarmers (individuals) have continued at about the same rate, 15 percent of the total, for several years. Sales by lending agencies and governmental units have accounted for less than 2 percent of the market annually since 1950.

Changes in Farm Organization as a Result of Sale

The farm real estate market provides an important means whereby farm operators can adjust the size of their operating units. In the aggregate, these transfers also have contributed to the decline in the total number of farms in recent years. With increased pressures for larger acreages to hold down or reduce production costs per unit, owner-operators have been the dominant class of buyer in most parts of the country. Because the supply of land on the market is so limited, farmers have been unable to restrict their purchases to unimproved tracts, but have been forced to buy complete farms. Although the transfer of a parcel of land from one farm to another does not affect the total number of farms, the number is reduced when a complete farm is bought for enlargement purposes. New farms can be formed from parts of other farms, of course, but this type of transfer has represented less than 7 percent of all transfers in recent years.

Sales data show a slow but steady decline in recent years in the proportion of total sales that were complete farms and a corresponding increase in the proportion that were parcels and tracts of land (table 5). Part of this shift in the composition of the market reflects the general decline in the total number of farms, but it also arises from an increased demand

Table 5.- Farm real estate transfers: Percentage distribution by method of operation before and after sale, United States, 1954 and 1958 1/

Item	All farms transferred	Operated after sale as - Single farm	Part of another farm	Part-time farm 2/
	Percent	Percent	Percent	Percent
Operated before sale as-				
Single farm:				
1954	73	58	13	2
1958	66	45	18	3
Part of another farm:				
1954	22	6	15	1
1958	28	6	21	1
Part-time farm: 2/				
1954	5	1	1	3
1958	6	1	1	4
All farms transferred-				
1954	100	65	29	6
1958	100	52	40	8

1/ Based on a sample of sales reported in March surveys.
2/ Includes rural residences of 10 acres or more.

for land to add to existing farms. In most commercial farming areas, parcels and tracts of land find a more ready market than do complete farms, particularly when the complete farms are above average in size. A higher total price often can be realized for a large farm if it is offered in two or more tracts.

About two-fifths of the purchases of land in 1957-58 were to be added to existing farms, compared with 38 percent a year earlier, and about 20 percent in 1950 (table 6). Nearly half of these purchases in 1957-58 were single farms before sale and the rest were parcels of land being transferred from one farm to another.

Regional Differences in Extent of Purchases for Farm Enlargement

Although the relative importance of purchases for farm enlargement varies between areas, market demand and prices have been strengthened throughout the Nation. The western two-thirds of the country is still mostly strongly affected, notably the spring and winter wheat areas where nearly two-thirds of the farmland purchases are for farm enlargement (fig. 4). However, the farm enlargement process has had a relatively smaller impact on changes in farm organization in those areas where enlargement purchases make up a smaller share of the market. In the latter areas, the proportion of transfers that were single farms prior to sale and which became parts of other farms after sale was much higher than in areas where enlargement is more important. In the wheat areas, in 1958,

Table 6.- Farm purchases: Percentage for farm enlargement, selected major type-of-farming areas, 1950-58 1/

Type-of-farming area	Average 1950-53	1954	1955	1956	1957	1958
	Percent	Percent	Percent	Percent	Percent	Percent
Northeast dairy	13	16	15	14	18	24
Lake States dairy	15	19	20	21	26	22
General farming	19	18	21	20	23	25
Eastern corn belt	28	33	40	41	45	46
Western corn belt	27	31	34	38	43	46
Wheat areas (eastern)	47	50	57	57	64	65
Western cotton	29	32	37	34	43	49
Western range livestock	30	36	37	38	39	48
United States	25	29	32	33	38	40

1/ Based on a sample of sales reported in March surveys. Most of the sales probably occurred during the 6 months preceding the date of the survey.

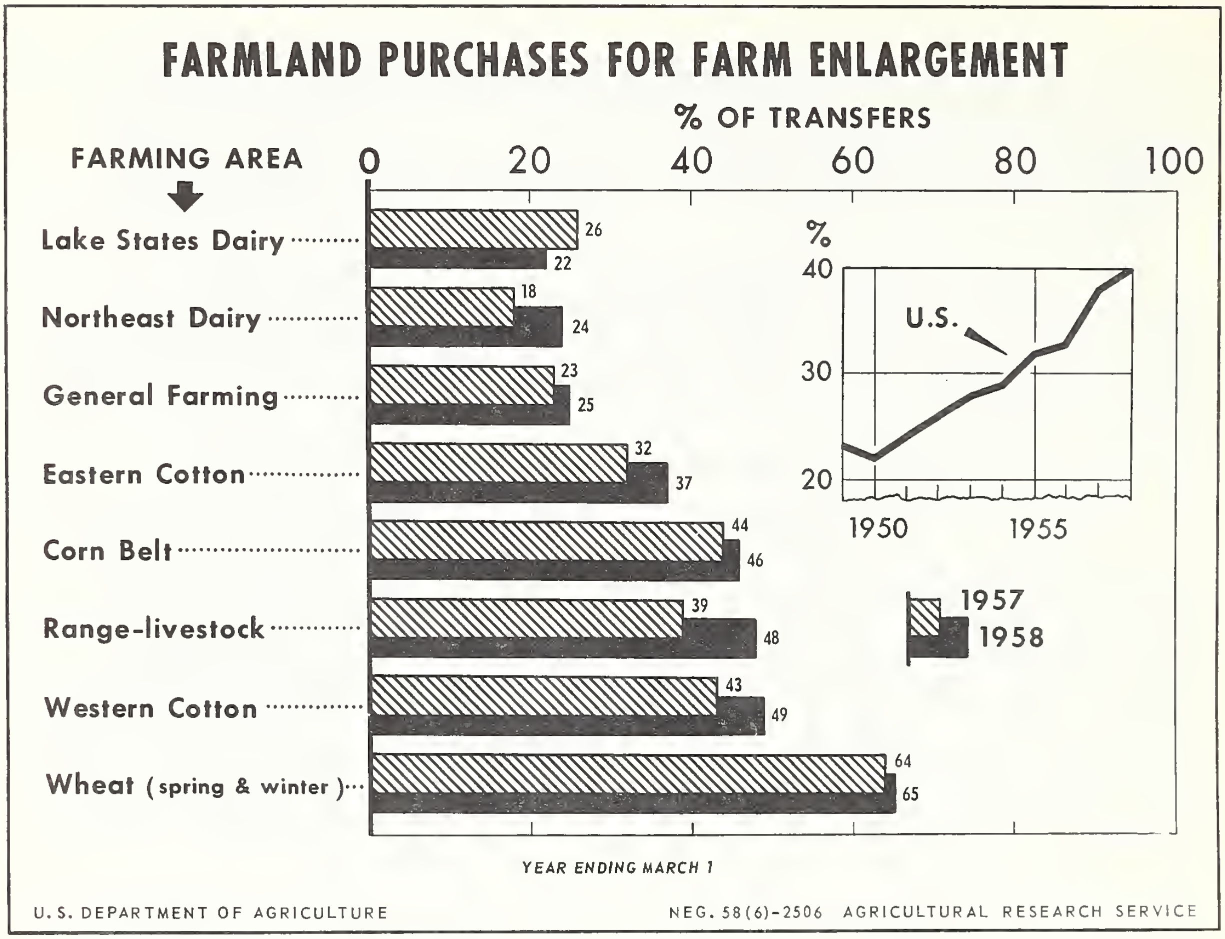


Figure 4

for example, nearly 45 percent of the transfers involved tracts of land moving from one farming unit to enlarge another farm. In the general farming area, the comparable figure was less than 10 percent. The proportion of enlargement purchases that involved single farms in the two areas was 15 and 55 percent, respectively. Thus even though farm enlargement purchases may be only a small part of the total market in the area, the disappearance of complete farms may be at a higher rate than in those areas where enlargement purchases are a major share of the market.

Little change in Frequency or Amount of Credit Used to Finance Land Purchases

Although minor changes occurred among regions, the proportion of all purchases in 1957-58 that were credit-financed was the same as a year earlier, 67 percent. The amount borrowed as a percentage of the purchase price increased from 63 to 64 percent. This slight increase, together with higher market values, suggests that the total new debt incurred as a result of the purchase of land also increased. Considerable variation exists among areas of the country in the proportion of all sales that are credit financed (tables 7 and 8). The range in 1957-58 was from less than

Table 7.- Credit-financed transfers: Proportion of all sales, and ratio of debt to consideration, farm production regions and United States, years ending March 1, 1954-58 1/

Farm production region	Proportion of all sales credit-financed					Ratio of debt to consideration				
	1954	1955	1956	1957	1958	1954	1955	1956	1957	1958
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Northeast	69	70	72	74	70	62	62	63	65	63
Corn Belt	63	65	70	70	71	51	52	55 2/	56	59
Lake States	75	75	78	79	78	61	61	62	67	69
Appalachian	51	54	56	56	53	59	59	60	63	60
Southeast	54	60	60	59	57	66	66	70	69	66
Delta States	59	62	64	62	66	62	66	61	66	64
Southern Plains	60	59	70	66	67	57	55	58	62	65
Northern Plains	52	53	58	56	58	56	57	58	58	62
Mountain	66	68	73	72	76	61	64	67	66	69
Pacific	70	74	72	78	77	60	61	64	63	65
United States	62	64	67	67	67	59	59	61	63	64

1/ Based on a sample of sales of farm property reported by farm real estate dealers and others in March surveys. Most of the sales probably took place during the 6 months preceding the date of the survey.

2/ Revised.

Table 8.- Credit-financed transfers: Proportion of all sales, ratio of debt to consideration and average debt per acre, selected type-of-farming areas, 1956-58 1/

Type-of-farming area	Proportion of all sales credit financed			Ratio of debt to consideration			Average debt per acre		
	1956	1957	1958	1956	1957	1958	1956	1957	1958
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Dol.	Dol.	Dol.
Northeast dairy	70	72	70	61	64	62	82	89	91
Lake States dairy	79	81	77	62	65	68	95	96	99
General farming	63	58	60	56	62	60	65	68	61
Eastern corn belt	65	71	71	51	52	57	136	155	170
Western corn belt	68	66	70	55	58	61	93	98	103
Spring wheat	66	63	64	68	67	71	24	29	24
Winter wheat	58	54	56	56	56	59	63	63	55
Eastern cotton	59	52	55	70	69	64	45	53	50
Central cotton	66	61	68	60	70	66	64	61	51
Western cotton	69	63	63	57	60	57	36	56	56
Northern range livestock	69	69	69	65	63	66	30	23	37
Southern range livestock	68	71	76	66	63	72	46	36	33
California specialty	66	76	77	63	64	66	199	194	221

1/ See footnote, table 7.

60 percent of total sales in the Appalachian, Southeast, and Northern Plains regions to more than 75 percent in the Lake States, Mountain, and Pacific regions. Less variation is apparent in the ratio of debt to purchase price. The Corn Belt has shown the lowest debt ratio on credit purchases for several years, less than 60 percent, whereas usually, the Southeast, Mountain, and Pacific regions have shown debt ratios of 65 percent or more.

Part of the general increase in the frequency with which land purchases have been credit-financed and the amount of debt incurred is due to the more frequent use of purchase contracts in recent years. Special treatment is given to capital gains for Federal income tax purposes when less than 30 percent of the purchase price is received by the seller as a downpayment. The land contract, or contract for deed, also is attractive to buyers who do not have sufficient equity to obtain financing under conventional mortgage requirements. Currently, it is estimated that about a fifth of all purchases and 30 percent of the purchases involving credit are financed by contracts. They are used most frequently in the Northern Plains, Mountain and Pacific regions, but their use has increased in all areas.

Nationally, tracts of land purchased to become parts of other farms are credit-financed less frequently than are single farms (table 9). This was true in all major type-of-farming areas, except the eastern cotton area. The debt incurred on parcels added to existing farms tends to represent a smaller proportion of the purchase price than in the case of complete farms. However, differences between areas are apparent. In areas where farm enlargement is most important, as in the Wheat and Corn Belts, these sales tend to have a lower debt ratio than complete farms, while in areas where enlargement is of lesser importance, they have a higher debt ratio.

Sellers Finance More Land Purchases

Usually, when a prospective buyer of farmland must borrow funds to pay for the land, a number of sources of funds are available to him. The final selection of the lender will depend upon which of the sources is most convenient, the security and loan limits prescribed, terms of repayment offered or required, personal factors, and other considerations.

Nationally, sellers (primarily individuals) continued to be the most important source of new credit to finance the purchase of farmland (fig. 5). In the 12 months ended March 1, 1958, they provided all of the credit to finance the purchase of 43 percent of the credit-financed transfers. The percentage they finance has increased steadily since 1955 when they financed 34 percent of credit transfers(table 10). Generally, interest rates charged by individual lenders are about the same as, or a little less than, rates charged by commercial banks, the second most important source of credit. These banks, which are gradually declining

Table 9 .- Credit-financed transfers: Percentage of all sales and debt incurred as a percentage of the purchase price, by operation after sale, selected type-of-farming areas and United States, 12 months ended March 1, 1958 1/

Type-of-farming area	Percentage of all purchases credit-financed		Debt as a percentage of the purchase price	
	Single farms	Part of another farm	Single farms	Part of another farm
	Percent	Percent	Percent	Percent
Northeast dairy	74	70	61	66
Lake States dairy	83	68	67	70
General farming	63	55	58	68
Eastern corn belt	75	67	58	56
Western corn belt	75	66	62	57
Spring wheat	77	59	69	67
Winter wheat	54	42	59	59
Eastern cotton	59	62	61	69
Central cotton	73	67	69	61
Western cotton	66	61	57	55
Northern range livestock	76	63	64	69
Southern range livestock	83	68	71	74
California specialty	80	70	65	66
United States	73	62	64	63

1/ Most of the sales probably occurred in the preceding 6 months.
2/ Includes 7 additional areas not shown separately. Area totals weighted by number of voluntary sales.

in relative importance as a source of credit to purchase farmland, financed 17 percent of the credit transfers during 1957-58. Insurance companies provided funds for 15 percent of the transfers last year. In 1955, they accounted for nearly a fifth of the credit transfers. The Federal land banks continued to provide funds for approximately a tenth of the purchases. Funds for the remaining credit transfers, 16 percent, were provided by individuals other than the seller (7 percent), two or more lenders (2 percent), and other unclassified sources.

Sellers Extend Most Credit

Individual sellers extend credit for a larger proportion of the purchase price than any other type of lender. In the 12 months ended

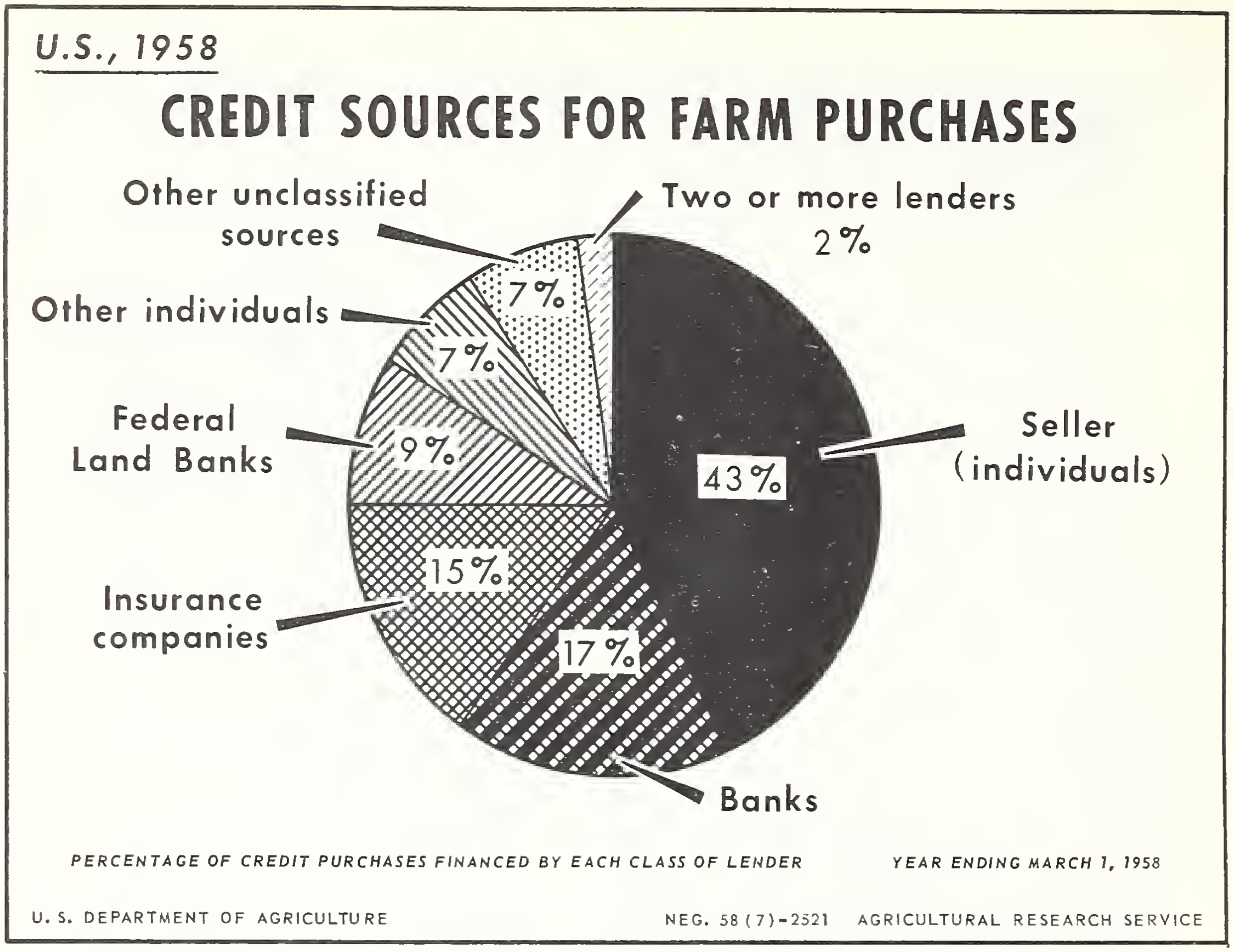


Figure 5

March 1958, these individuals extended credit equal to 71 percent of the purchase price. 2/ This high level of debt results partly from the fact that nearly all of the sales on contract are made by this group.

Among the other more important lenders, the 56 percent of the purchase price extended as credit by commercial banks does not differ greatly from the percentage extended as credit by insurance companies or the Federal land banks. Legal limitations on farm real estate loans made by banks are usually more restrictive than those of either insurance companies or Federal land banks. National banks cannot make loans for a period in excess of 20 years and may loan up to a maximum of two-thirds of the appraised value of the property. The term of insurance company and Federal land bank loans may extend beyond 20 years. The credit extended by Federal land banks as a percentage of the purchase price as shown in table 10, has been stable since at least 1955. In the case of other major lender groups, the percentage of the purchase price extended as credit has shown a general increase.

2/ See footnote 2, table 10.

Table 10.- Credit-financed farm purchases: Percentage financed by specified lenders, and amount of credit extended as percentage of purchase price, United States, years ending March 1, 1955-58 1/

Source of credit	Percentage of credit-financed purchases				Credit as percentage of purchase price			
	1955	1956	1957	1958	1955	1956	1957	1958
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Sellers (individuals)	34	37	41	43	68	68	71	71
Commercial banks	20	19	18	17	52	53	54	56
Insurance companies	19	18	16	15	49	49	52	54
Federal land banks	9	10	10	9	51	52	51	50
Individuals other than sellers	9	6	5	7	60	60	61	65
Two or more lenders	2	3	4	2	63	65	74	70
Other sources	7	7	6	7	70	71	71	70
Total or average	100	100	100	100	59	61	63	64

1/ Most of the sales probably occurred in the preceding 6 months.

2/ Many purchasers of farm real estate offer land that they already own as additional security for the land being purchased. Thus the amount of debt as a percentage of the purchase price for purchases reported here is considerably higher than it would be if loans were secured by only the land purchased, and is also considerably higher than the ratio of this debt to the value of the farm real estate security.

EFFECTS OF LOCATION AND ROAD TYPE ON MARKET VALUES OF FARM REAL ESTATE

Location of farms with respect to persons and places and the type of road providing access have long been recognized as contributing to market values of farm real estate. The U. S. Department of Agriculture made economic surveys of county highway improvements as early as 1913 and many other studies have been made since then to isolate and measure the benefits of improved highways to the Nation's farms. Much of the interest arose in the 1920's when widespread efforts were made by local, State, and Federal highway agencies to "get the farmer out of the mud." The success of these efforts is reflected in the decline in the percentage of farms on dirt roads from 77 percent of the total in 1925 to 33 percent in 1950. The percentage on gravel roads more than doubled and the percentage on hard-surfaced roads increased fourfold.

Current interest stems from the Highway Act of 1956, which provided for a long-range program of highway construction and improvement, including 41,000 miles of interstate system to be financed largely from taxes imposed upon highway users. Questions concerning the direct and indirect benefits derived from highways were raised in this legislation with a view to developing a financing program that would most nearly allocate costs to those who benefited most from new and improved highways.

Although savings in travel time and in operating costs of motor vehicles operated by nonfarmers are the major benefits from highway improvements, increases in real estate values are important secondary results. The extent to which such increases in market value of land represent the capitalized value of the savings realized by highway users, and whether the contribution of property owners to highway costs are proportional to the benefits they receive are the primary questions involved.

The types of roads that provide access to farms and travel times or distances to trading centers, markets, schools, churches, and social centers are closely related. Often there are inseparable attributes that have market value. Although there is no clearly definable process by which these attributes are valued in the market, they contribute to value in three main ways. The first is through their direct effects upon net income from agricultural production, either by influencing costs of production inputs or returns from products sold. Second, location and highway facilities affect the amount and cost of amenities available to farm families. These values are clearly separate from those that accrue to the farm business, and they are wholly subjective. Even so, the market reflects the aggregative opinions of sellers and buyers with respect to such values and provides a selective mechanism whereby those individuals who place similar or higher values on location and highways can become effective bidders.

The third means whereby values of farm real estate can be affected is through the opportunities created for conversion of farmland to higher and more profitable nonfarm uses. Such site values are often speculative and depend upon circumstances beyond the control of the property owner. Although these increases in property values are often substantial and are clearly associated with particular locational or highway attributes, the benefits accrue to a relatively small number of property owners. Many special considerations also are involved in the valuation of land for nonfarm purposes; they would require special study. Major attention in this discussion is given to identifying and measuring the effects of location and road surface on the market value of lands that remain in agricultural uses.

Although the quality and cost of transportation services required by agriculture as an industry affect net returns to all factors of production to some extent, net returns to land are affected most directly because land is the only productive factor that is not mobile. Location with respect to markets and the transportation services available directly affect the choice of enterprises that will result in highest net returns and the cost of inputs required in the production process, as well as the prices received for farm products.

Purchased inputs requiring transportation to farms totaled nearly $14 billion in 1957, or about 55 percent of total inputs. Annual expenditures by farmers for the operation, maintenance, and depreciation of motor vehicles used in the farm business amounted to about $3.2 billion. In addition, farmers spent about $400 million for custom trucking.

Although these are gross measures of the importance of all forms of transportation to the agricultural industry, practically all of the purchased inputs reach their final destination by highway. Likewise, the initial movement of most of the $30 billion in farm products sold annually to first markets is by highway. Shipping distances via highway and frequency of use vary widely among products and areas. The extreme range is from those areas that produce such perishables as milk, eggs and truck crops, which require almost daily transportation services for both purchased inputs and output, to extensive crop and livestock areas where services are required only at planting and harvesting.

Savings that may be realized by the agricultural industry as a result of highway improvements depend largely upon the extent to which such savings are reflected in the rate structures of common carriers and the proportion of the total transportation services that are provided by farmer-owned vehicles. For that part of the total tonnage moved to and from farms by hired facilities, only a part of the savings is likely to accrue to agriculture. The remainder is retained as increased returns to the transportation industry. Although all of the saving realized in transporting goods by farmer-owned vehicles is retained in the agricultural sector, part of it should be treated as returns to the labor and capital used in providing the transportation facilities and part as increased returns from farm production. However, there is no clearly defined process by which total returns to agriculture are allocated among the various factors. Individual preferences and judgments that largely determine the extent to which increases in farm earnings that are attributable to lower transportation costs are capitalized into the value of farms.

Extent and Possible Effects of Highway Construction, March 1958

A preliminary step in this study of the possible interaction between roads and farmland values was to determine the extent of, and the regional variations in, highway construction activities as seen by local people close to the farm real estate market. Nearly two-thirds of the reporters in the March 1958 survey said that actual construction was in process or was planned in their localities. [3] The proportion noting highway construction ranged from less than three-fifths in the eastern Corn Belt and winter wheat areas to more than four-fifths along the Gulf coast in the Southeast, and in California. The regional variations in frequency of highway construction tend to parallel the incidence of dirt or unimproved roads across the Nation. That is, construction was reported more frequently in those areas in which quality of the road network is generally lowest. Information as to type of construction was not given, but it seems reasonable to assume that most of it involved an upgrading in road quality.

Half of the reporters who noted highway construction believed that the activity would affect the farm real estate market. As might be expected, considerable regional variation was apparent; it tended to reflect the quality of the existing road network as well as the relative importance of roads to the farm business. Thus, in the extensive farming areas of the West - wheat and range livestock - and in the Corn Belt, the proportion of reporters who anticipated effects on the farm real estate market was less than the national average. It dropped to as low as a third in the winter wheat area. In the cotton areas and the Northeast, more than half of the reporters expected highway construction to have some local effect on the farm real estate market. In the eastern cotton area, the proportion was 71 percent.

Premiums and Discounts to Sales Prices Associated with Road Type

Although several approaches can be used to determine the effects of road type on sales prices of farm real estate, the method used in this study was to obtain such estimates from the farm real estate reporters - informed local people who were familiar with the property and with market values but were otherwise disinterested. They were asked to report a sample of recent sales in their communities. For each sale, they gave the actual sales price and estimated the probable sales price if the property had been located on a lower or higher type road.

---

[3] This group of reporters consists of farm real estate dealers, local bankers, lawyers, county officials, local representatives of lending agencies, and others familiar with the farm real estate market in their locality. Most of them have cooperated for several years in surveys concerning developments in the farmland market. As these reporters are in close contact with sellers and buyers and are believed to keep well informed as to current market trends, their opinions are considered to reflect those held generally within their communities.

Two of the questions presented to these reporters in the March 1958 survey were: "Is there any road or highway construction in process, or planned, in your locality? If "yes", do you expect this to have any effect on the farm real estate market?" The replies to these two questions provide the basis for the discussion in this section.

This approach has the advantage of holding all other physical characteristics of the property constant, allowing only the type of road to vary. The estimated sales price can be related to a known sales price and the percentage spread computed. Broad geographic coverage was possible also although the number of reports for certain types of roads in some areas was not adequate for reliable comparisons. A more serious limitation, however, is that through this procedure, subjective estimates rather than actual sales prices of similar properties located on various types of roads are obtained. This latter procedure would be preferable if it were possible to obtain information about a sufficient number of sales of properties on each type of road and to hold all value determinants, except road type, constant. Repetition of the current survey is planned to increase the number of observations in order to permit more comprehensive analysis. The results discussed here, therefore, should be considered preliminary.

Distribution of sales by road type.- Sales reported in the survey showed a similar distribution by road type to that of all farms, if allowance is made for improvements in highway surfaces that have been made since 1950. About a fifth of the properties sold were on dirt roads, 43 percent were on gravel roads, and the rest were on hard-surfaced roads (table 11). The latter group was further classified on the basis of number of lanes, but only about 5 percent of these farms were reported to be on highways with three or more lanes.

Regional differences in the distribution of properties by type of road providing main access were similar to the differences shown by the 1950 census data (fig. 6). The proportion of properties situated on dirt roads ranged from below 10 percent in the eastern Corn Belt and Pacific Northwest to about a third or more in the eastern and western cotton and winter wheat areas. The largest percentage (69 percent) of properties on gravel roads was in the western Corn Belt, while less than 10 percent of the properties in California were on gravel roads. However, more than 80 percent of the sales in the latter area involved farmland situated on hard-surfaced roads. This type of road was reported least frequently in the western part of the Corn Belt and in the spring wheat area.

Premiums associated with gravel roads.- Reporters estimated that the sales prices of properties on dirt roads would have been from 3 to 11 percent higher if these properties had been served by gravel roads (table 12). The smaller premiums tend to be found in the western areas,

Table 11.- Sales of farm real estate: Percentage distribution by type of road on which property was located, selected type-of-farming areas, March 1, 1958 1/

Type-of-farming area	Number of sales	Percentage located on:			
		Dirt road	Gravel road	Hard-surfaced road	
				2-lane	3 lanes or more
	Number	Percent	Percent	Percent	Percent
Northeast dairy------	350	17	21	59	3
Lake States----------	582	14	43	41	2
General farming------	631	20	41	37	2
Eastern Corn Belt----	570	5	50	44	1
Western Corn Belt----	1,186	12	69	18	1
Spring wheat---------	310	29	55	15	1
Winter wheat---------	338	41	33	24	2
Eastern cotton-------	190	32	19	48	1
Central cotton-------	195	17	54	26	3
Western cotton-------	256	35	25	37	3
Northern range livestock-----------	395	27	40	31	2
Southern range livestock-----------	128	24	31	41	4
Northwest wheat and dairy-----------	107	6	47	44	3
California specialty-----------	195	10	8	78	4
United States 2/-	5,762	20	40	38	2

1/ Most of the sales probably occurred in the preceding 6 months.

2/ Includes 4 additional areas not shown separately. Area totals weighted by number of voluntary sales.

3 and 4 percent in the winter wheat and western cotton, and the largest (10 to 11 percent) in the general farming and eastern cotton areas. 4/

4/ As with actual sales prices, estimated prices showed a great deal of variation. To determine whether this variation was large enough to account for the average differences between actual and estimated prices, a T-test of the significance of differences between means was applied to the data. The areas in which this test indicated that the difference between actual and estimated prices was significant despite the variation, are indicated by asteriks in tables 12, 13, and 14. The premium or discount so marked is believed to be a more reliable measure of the actual market premium, or discount, in the area than those shown for the unmarked areas.

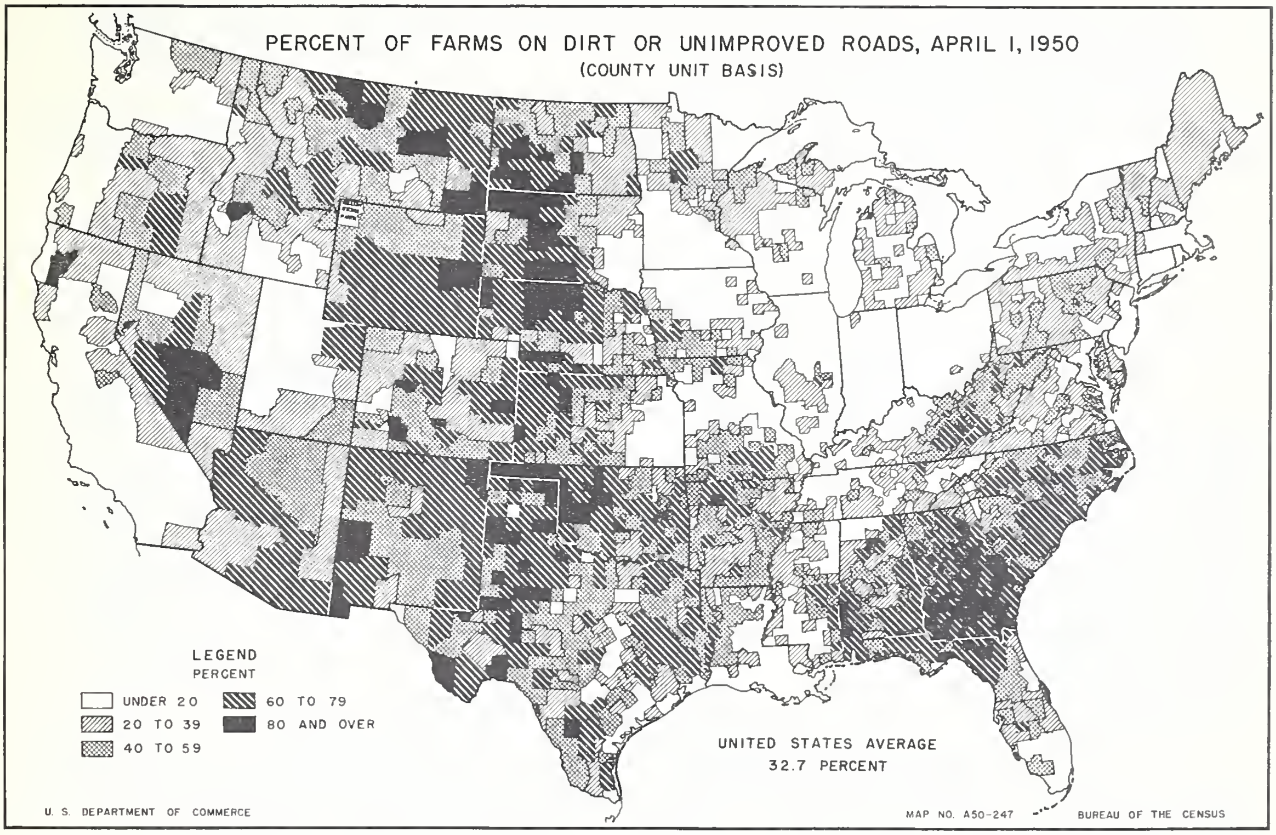


Figure 6

An additional indication of the premium attached to locations on gravel roads may be obtained from the estimates of probable sales prices of these properties if they had been located on dirt roads. These estimates for location on dirt roads, expressed as a percentage discount from the actual sales prices of properties on gravel roads, are shown in table 13. Although close agreement is not to be expected because a different group of properties and reporters is involved, the discounts agree in general with the estimated premiums. This is true particularly in those areas in which both premiums and discounts were found to be statistically significant.

Premiums associated with hard-surfaced roads.- The increase in sales prices of farms expected as a result of converting a dirt road to a hard-surfaced road was greater in all areas than the increase resulting from a dirt-to-gravel shift, and the range in the premiums between areas was also greater. However, as in the case of the dirt-to-gravel premiums, they tended to be highest in the eastern areas. Thus, sales prices of properties on dirt roads in the winter wheat and northern range livestock areas would have been less than 10 percent higher if the properties had been on hard-surfaced roads, while in the general farming area, the sales prices would have been nearly a third more. A check of these premiums

Table 12.- Farm properties located on dirt roads: Average sale price and estimated premium for gravel or hard-surfaced roads, selected type-of-farming areas, March 1, 1958 1/

Type-of-farming area	Sales	Average sale price		Premium, as percentage of sale price for location on 2/-	
		Per acre	Per farm	Gravel road	Hard-surfaced road
	Number	Dollars	Dollars	Percent	Percent
Lake States dairy	25	114.25	12,100	3	12
General farming	56	60.50	8,550	11*	32*
Western Corn Belt	68	97.85	20,485	7*	14*
Spring wheat	49	32.40	26,865	11	17*
Winter wheat	64	89.50	24,325	3*	7*
Eastern cotton	32	54.50	13,325	10*	19*
Western cotton	50	85.80	16,975	4*	17*
Northern range livestock	66	25.50	30,450	5	8*

1/ Most of the sales probably occurred in the preceding 6 months.
2/ Asterisks indicate areas in which the estimated premium was found to be statistically significant at the 1 percent level.

can be obtained from the estimates gathered from the sample of sales of farm property located on hard-surfaced roads. These estimates, which are shown as discounts from sales prices for location on gravel or dirt roads, are presented in table 14. They are in general agreement with the premiums computed from the sales of properties located on dirt roads.

The increase in the sales price of a farm that might be expected to occur as a result of upgrading the road that provides access to the property from gravel to hard surface ranged from 3 percent in the eastern Corn Belt to 20 percent in the western cotton area. However, in all except two of the areas selected for analysis, the premium was less than 10 percent. Greater variation was evident in individual estimates within each area than in estimates for upgrading dirt roads. The discounts estimated for downgrading roads from hard-surface to gravel are in general agreement with the gravel to hard-surface premiums. Like the premiums, the discounts were less than 10 percent in most areas; they averaged highest in the general farming area.

The increase in the sales price that is associated with an upgrading in road quality tends to vary with the quality of the existing road network and the importance of roads to the operation of the farm business. In those areas with a predominance of improved road surfaces

Table 13.- Farm properties located on gravel roads: Average sale price, estimated discount for dirt roads and estimated premium for hard-surfaced roads, selected type-of-farming areas, March 1, 1958 1/

Type-of-farming area	Sales	Average sale price-		Premium or discount, as a percentage of sale price for location on 2/-	
		Per acre	Per farm	Dirt road	Hard-surfaced road
	Number	Dollars	Dollars	Percent	Percent
Lake States dairy---:	107	141.75	18,375	-7	+5
General farming-----:	141	101.95	15,290	-17*	+13
Eastern Corn Belt---:	136	278.00	42,285	-8	+3
Western Corn Belt---:	423	170.10	29,090	-8*	+6
Spring wheat--------:	88	40.65	23,015	-5	+4
Winter wheat--------:	52	99.80	22,825	-4	+5
Central cotton------:	56	116.65	20,025	-11	+7
Western cotton------:	31	78.00	19,300	-16	+20
Northern range livestock----------:	81	44.90	31,280	-3	+4

1/ Most of the sales probably occurred in the preceding 6 months.
2/ Asterisks indicate areas in which the estimated discount was statistically significant at the 5 percent level.

or in which the farm business is less dependent on roads than in other areas, the increase in value of the farm property as a result of an upgrading of road surfaces is relatively small. For example, in the Corn Belt, an area with a low proportion of dirt or unimproved roads, and in the western range areas, the premiums for gravel and hard-surfaced roads are smallest. But where a large proportion of the roads are unimproved or the farm business relies heavily on roads, as in the general farming and cotton areas, upgrading of road surfaces means a larger increase in farmland values.

Relationships Between Road Type and Other Value Determinants

Direct comparisons of sales prices for properties located on different types of roads are not valid in the present study because it was not possible to hold constant the factors other than road type that influence prices. However, a number of comparisons were made to determine possible associations between road type and other attributes of the properties sold.

In some areas, an association is apparent between road type and quality and extent of buildings. This was particularly evident in the general farming, western Corn Belt, central and western cotton, and northern range livestock areas. In these areas, properties on

Table 14.- Farm properties located on hard-surfaced roads: Average sale price and estimated discount for gravel or dirt roads, selected type-of-farming areas, March 1, 1958 1/

Type-of-farming area	Number of sales	Average sale price		Discount, as a percentage of sale price, for location on 2/ -	
		Per acre	Per farm	Dirt road	Gravel road
	Number	Dollars	Dollars	Percent	Percent
Eastern dairy	66	150.30	18,175	16	10
Lake States dairy	95	175.70	23,650	13	6
General farming	109	159.30	21,350	27*	16
Eastern Corn Belt	107	344.90	45,375	12*	6
Western Corn Belt	99	205.30	28,975	13*	6
Winter wheat	48	129.55	26,000	10	7
Eastern cotton	33	118.20	16,625	18	5
Central cotton	25	135.10	28,475	25	14
Western cotton	44	102.10	22,800	14	9
Northern range livestock	71	58.43	59,500	5	3
California specialty	64	298.30	72,400	10	6

1/ Most of the sales probably occurred in the preceding 6 months.

2/ Asterisks indicate areas in which the estimated premium was found to be statistically significant at the 1 percent level.

roads of higher quality tended to have buildings of better quality than properties on dirt roads; also a higher proportion of the properties with no buildings were located on dirt roads.

The quality of the land is a value determinant that would need to be held constant in order to measure the effects of road type on sales prices. If farms on roads with the higher quality surfaces also had better quality of land, premiums determined from sales data would be biased upward. This situation does exist in some areas. Road type and land quality are not independent of each other.

Still another variable that affects value is the location of the properties with respect to trading centers and hard-surfaced roads, as well as the association between location and road type. About half of the properties included in the March 1958 sample of sales were less than 5 miles from the nearest trading center (table 15). This proportion tended to be lowest in the western range areas and highest in the eastern areas where population is denser. Nearly two-fifths of the sales were 5 to 10 miles from a trading center. Although nationally only 8 percent were between

Table 15.- Distribution of properties sold by distance to nearest trading center, selected type-of-farming areas, March 1, 1958 1/

Type-of-farming area	Sales	Number of miles to nearest trading center: Less than 5	5-10	11-20	21 or more
	Number	Percent	Percent	Percent	Percent
Northeast dairy	350	68	29	3	---
Lake States dairy	479	61	37	2	---
Lake States cut-over	101	55	39	6	---
General farming	623	48	39	12	1
Eastern Corn Belt	565	65	35	2	---
Western Corn Belt	1,175	55	41	4	---
Spring wheat	310	37	40	17	6
Winter wheat	333	44	43	12	1
Eastern cotton	190	39	47	12	2
Central cotton	191	39	48	12	1
Western cotton	251	45	45	10	---
Northern range livestock	388	37	37	18	8
Southern range livestock	128	31	45	13	11
California specialty	194	49	32	15	4
United States	5,623	51	39	8	2

1/ Most of the sales probably occurred in the preceding 6 months.

11 and 20 miles from a trading center, the proportions ranged between 10 and 18 percent in all except the more densely populated areas. Most of the properties that were more than 20 miles from a trading center were in the spring wheat or western areas.

It was evident that in several areas, distance from a trading center was associated with road type. Properties "close in" tended to be on the better quality roads. This was observed in the central, western cotton, and range livestock areas (table 16).

A second measure of location is the travel distance to hard-surfaced roads from properties on dirt or gravel roads. In all except the wheat and range areas, 95 percent of the properties were within 10 miles of such a road, and in most of these areas, 80 percent or more were less than 5 miles away (table 17). Travel distances to hard-surfaced roads were about the same for properties on dirt roads as for those on gravel roads.

Table 16.- Distance to nearest trading center: Percentage distribution of sales by type of road, selected type-of-farming areas, March 1, 1958 1/

Area and miles to trading center 2/	Type of road on which properties sold were located			Total
	Dirt	Gravel	Hard-surface	
	Percent	Percent	Percent	Percent
Northeast dairy:				
Less than 5	15	22	63	100
5-10	21	21	58	100
11 or more	8	17	75	100
Lake States dairy:*				
Less than 5	14	39	47	100
5-10	13	48	39	100
11 or more	50	42	8	100
General farming:*				
Less than 5	16	42	42	100
5-10	18	48	34	100
11 or more	40	23	37	100
Western Corn Belt:*				
Less than 5	10	66	24	100
5-10	14	73	13	100
11 or more	17	77	6	100
Eastern Cotton:				
Less than 5	27	11	62	100
5-10	30	28	42	100
11 or more	50	15	35	100
Northern range livestock:*				
Less than 5	18	41	41	100
5-10	30	43	27	100
11 or more	38	37	25	100
California specialty:				
Less than 5	6	6	88	100
5-10	9	13	78	100
11 or more	19	6	75	100

1/ Most of the sales probably occurred in the preceding 6 months.

2/ Asterisks indicate areas in which a statistically significant association exists between road type and distance. Some areas showing this association are not shown. Significance was determined by use of the Chi-square distribution with Chi-square computed using an R x C table.

Table 17.- Farm properties located on dirt and gravel roads: Percentage distribution by distance from hard-surfaced roads, selected type-of-farming areas, March 1, 1958 1/

Type-of-farming area	Proportion by distance from hard road					
	On dirt roads			On gravel roads		
	Less than 5 miles	5-10 miles	10 miles or more	Less than 5 miles	5-10 miles	10 miles or more
	Percent	Percent	Percent	Percent	Percent	Percent
Eastern dairy------	98	2	---	95	4	1
Lake States dairy--	94	6	---	91	9	--
General farming----	80	18	2	93	7	--
Eastern Corn Belt--	96	4	---	93	7	--
Western Corn Belt--	75	20	5	78	20	2
Spring wheat-------	50	24	26	49	32	19
Winter wheat-------	72	23	5	85	9	6
Eastern cotton-----	89	11	---	80	20	--
Central cotton-----	88	12	---	81	18	1
Western cotton-----	89	10	1	88	12	--
Northern range livestock---------	49	31	20	67	19	14
Southern range livestock	54	32	14	59	36	5
California specialty --------	84	16	--	95	7	--

1/ Most of the sales probably occurred in the preceding 6 months.

The data available are inadequate to permit isolation of the effects of distance on sales prices. However, a preliminary analysis shows that with road type held constant, sales prices of farm properties tend to decline as distance from a trading center increases. In the case of properties located on dirt or gravel roads, this was true also of distance from hard-surfaced roads. These and other factors mentioned in this section will be analyzed when more adequate data become available.

Special Features of the Interstate System

Because of the advanced engineering and safety standards specified for the interstate system, the effects on rural property of construction of these highways are likely to differ considerably from the effects of highway improvements in the past. More land will be required per mile of right-of-way; fragmentation of operating units will occur more frequently; and entry of vehicular traffic from farms, as well as from other sources, will be restricted to designated access points. Except for those farms near interchanges and on roads leading to them, the system of primary and secondary roads that existed before construction of the interstate highway system will continue to provide access to most farms.

About three-fourths of the 41,000 miles of the interstate system will require new rights-of-way and the rest will require widening of existing highways. Cost estimates made as of the last half of 1956 place total right-of-way costs for the system at $5.3 billion, or 13.5 percent of the total cost. Although a major part of the total cost will be incurred in nonagricultural areas, a substantial acreage of rural land will be required. With new rights-of-way ranging between 250 and 300 feet, up to 40 acres of land will be required per mile. An additional 100 feet will be needed when existing highways are widened. Thus, the total acreage of land needed for the interstate system is estimated at about 1.5 million acres, of which a little more than two-fifths will be land suitable for cultivation.

Limited-access highways are likely to add little, if any, to the productive value of the farms they cross or those immediately adjacent. The size of some of the smaller farms will be reduced sufficiently to make them uneconomic units, and changes in cropping and rotation practices will be required on most farms. Movement of farm machinery, livestock, and crops between the separated portions of a farm will be hampered or made unfeasible, depending upon the distance between interchanges.

In most States, the landowner is entitled to compensation for these consequential damages, in addition to the value of the land actually taken. Although appraisal of a farm before and after taking provides one approach for determining severance damages, this method may often underestimate the full effects of higher operating costs on the net return to the land remaining. Currently, however, there are few guides to the nature and size of these costs because they vary so greatly among different types of farms. If severance damages could be determined and discounted to a current value, the landowner could then be paid an amount equal to the probable reduction in the market value of the land remaining.

Other types of consequential damages are recognized and are compensable in some States, while a few States permit benefits from highway construction to be estimated and used to offset damages. This is most applicable in the case of a general-access highway which may add site value to land that was previously valued only as farmland.

Amenity benefits of limited-access highways to farm families also are likely to be less than with conventional highways. Although those farms near interchanges and on roads leading to these points would have more favorable access to the larger urban centers than previously, travel distances for most others would remain unchanged or would increase. If crossings and interchanges were widely spaced, new routes of travel to trading and market centers would be necessary. In some instances, travel costs would be increased, and the types or qualities of services available would be reduced.

Limited-access highways add little, if any, to the site value of farmland, unless access is provided by service roads. Thus, opportunities for the sale of farmland for nonfarm uses will be limited to the immediate area of interchanges and along the general-access roads leading to them. The extent and character of this network is likely to become increasingly important in influencing shifts in land use to nonfarm uses. Although the effects of urban and industrial expansion will become more widely diffused through agricultural areas, the supply of land with desirable location will be greatly increased. Present differentials in market prices for land for farm and nonfarm uses may become less because of the increased supply.

Table 18 .- Farm real estate: Index numbers of average value per acre, by States and farm production regions, July 1958, and selected dates 1/

(1947-49=100)

State and region	1940	1950	1956	1957			1958	
				March	July	Nov.	March	July
Maine	69	95	107	114	115	116	118	120
New Hampshire	67	97	108	113	115	117	119	121
Vermont	58	101	107	112	116	117	120	124
Massachusetts	74	99	108	117	120	122	126	130
Rhode Island	66	101	112	122	127	131	133	137
Connecticut	65	100	115	126	131	135	138	141
New York	59	105	124	133	135	135	137	142
New Jersey	62	103	143	156	162	165	168	173
Pennsylvania	58	102	143	154	159	161	163	164
Delaware	55	98	135	148	153	159	163	166
Maryland	50	99	140	153	156	162	167	170
Northeast	60	102	130	139	143	145	147	151
Ohio	46	101	151	161	168	169	171	174
Indiana	44	103	154	166	169	172	173	176
Illinois	50	108	149	161	167	168	169	173
Iowa	51	108	136	142	145	146	147	149
Missouri	50	106	134	146	149	152	156	161
Corn Belt	49	106	144	154	159	160	162	165
Michigan	46	100	141	152	155	158	158	161
Wisconsin	58	101	117	127	132	130	133	135
Minnesota	55	109	145	160	163	166	171	173
Lake States	54	104	135	147	150	152	154	157
Virginia	48	101	143	152	155	160	161	165
West Virginia	58	95	117	125	130	131	132	136
North Carolina	43	106	146	154	158	158	161	164
Kentucky	42	102	115	127	131	133	133	137
Tennessee	42	103	121	129	131	136	136	139
Appalachian	44	103	130	139	142	145	146	150
South Carolina	43	97	126	136	139	141	143	147
Georgia	45	99	145	157	164	168	171	175
Florida	57	97	157	183	190	199	213	219
Alabama	47	101	134	142	149	152	152	158
Southeast	48	99	141	156	162	166	171	176

See footnotes at end of table.

-Continued

Table 18.- Farm real estate: Index numbers of average value per acre, by States and farm production regions, July 1958, and selected dates 1/ - Continued

(1947-49=100)

State and region	1940	1950	1956	1957			1958	
				March	July	Nov.	March	July
Mississippi	46	106	147	159	164	169	169	172
Arkansas	40	105	132	144	147	150	154	157
Louisiana	57	105	146	161	2/ 167	170	174	181
Delta States	46	104	140	152	2/ 157	160	163	167
Oklahoma	50	108	138	148	149	154	155	158
Texas	55	102	139	151	152	158	158	161
Southern Plains	54	103	139	150	151	157	157	160
North Dakota	48	107	136	150	153	156	162	165
South Dakota	47	111	140	146	149	153	156	161
Nebraska	47	104	133	131	136	141	146	149
Kansas	45	106	133	136	140	141	147	150
Northern Plains	46	107	135	138	142	145	150	154
Montana	43	104	152	162	166	170	171	176
Idaho	43	107	146	152	153	155	158	161
Wyoming	40	100	123	121	126	127	128	132
Colorado	37	104	124	121	125	128	130	133
New Mexico	36	107	137	133	138	140	141	144
Arizona	40	99	144	145	2/ 149	154	157	161
Utah	49	107	134	136	140	141	142	145
Nevada	49	99	142	145	148	151	153	156
Mountain	41	104	138	139	143	146	148	151
Washington	45	101	140	147	152	155	156	162
Oregon	41	99	130	137	141	143	144	147
California	42	94	137	147	152	154	158	163
Pacific	42	96	137	146	151	153	156	161
United States	49	103	138	147	151	154	156	159

1/ All farmlands with improvements as of March 1, except as indicated.
2/ Revised.

Table 19.- Farm real estate: Index numbers of average value per acre, by States and geographic divisions, July 1958 and selected dates 1/

(1912-14=100)

State and division	1920	1940	1956	1957			1958	
				March	July	Nov.	March	July
Maine	142	95	148	158	160	162	163	166
New Hampshire	129	94	152	159	162	165	167	171
Vermont	150	101	186	195	202	204	209	215
Massachusetts	140	113	164	179	183	187	193	199
Rhode Island	130	120	204	223	232	239	243	250
Connecticut	137	124	220	241	251	259	264	269
New England	140	106	173	186	191	194	198	203
New York	133	86	179	193	196	195	198	206
New Jersey	130	116	270	294	305	311	317	327
Pennsylvania	140	90	222	237	246	248	252	254
Middle Atlantic	136	90	205	221	227	228	231	237
Ohio	159	77	252	267	279	280	285	289
Indiana	161	74	260	281	285	288	293	297
Illinois	160	75	224	242	250	251	254	258
Michigan	154	91	279	300	306	311	311	318
Wisconsin	171	84	169	183	190	187	191	194
East North Central	161	78	231	249	257	258	261	265
Minnesota	213	86	225	248	252	258	265	268
Iowa	213	74	198	206	212	214	215	218
Missouri	167	59	158	172	175	179	183	188
North Dakota	145	52	147	161	164	167	175	178
South Dakota	181	41	122	127	130	133	136	140
Nebraska	179	58	165	164	170	176	182	186
Kansas	151	71	212	215	222	224	233	239
West North Central	184	65	181	190	194	198	203	207
Delaware	139	89	217	238	247	257	262	267
Maryland	166	100	282	307	312	326	335	341
Virginia	189	112	332	353	359	373	375	383
West Virginia	154	85	172	183	192	192	194	199
North Carolina	223	138	471	494	508	509	518	530
South Carolina	230	89	263	284	289	295	298	308
Georgia	217	82	265	288	300	306	313	320
Florida	178	133	366	428	443	465	497	511
South Atlantic	199	106	317	344	353	362	371	380

See footnotes at end of table

-Continued

Table 19.- Farm real estate: Index numbers of average value per acre, by States and geographic divisions, July 1958, and selected dates 1/ - Continued

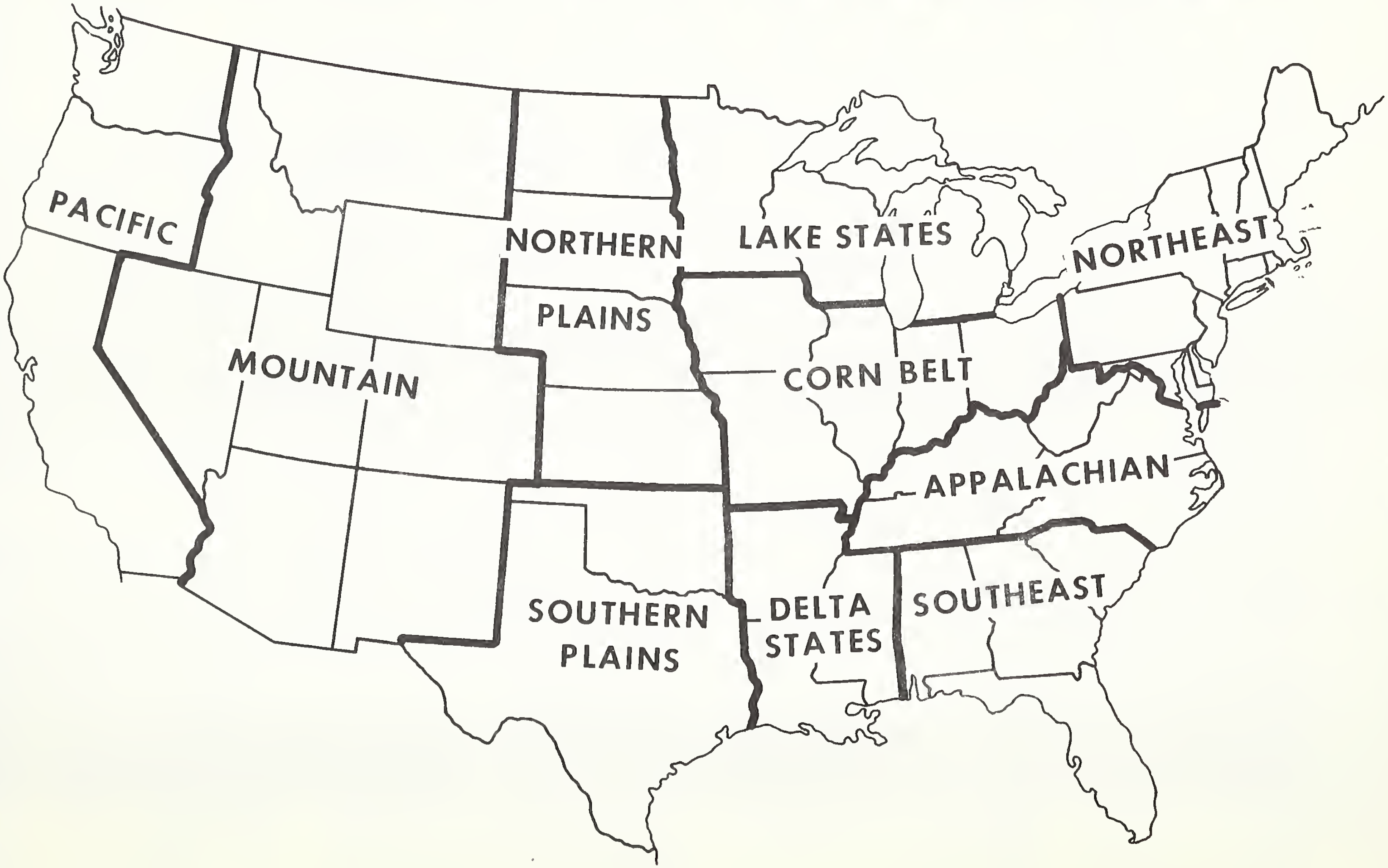
(1912-14=100)

State and division	1920	1940	1956	1957			1958	
				March	July	Nov.	March	July
Kentucky	200	113	309	340	352	358	358	368
Tennessee	200	108	312	332	336	350	350	357
Alabama	177	122	345	365	384	391	391	405
Mississippi	218	106	340	368	379	391	391	397
East South Central	199	112	323	348	359	368	368	378
Arkansas	222	95	312	340	347	355	364	370
Louisiana	198	121	308	340 2/	351 2/	358	366	382
Oklahoma	166	93	259	277	279	288	289	296
Texas	174	99	250	273	274	286	285	290
West South Central	177	99	258	280 2/	283	293	294	300
Montana	126	55	193	206	211	216	218	225
Idaho	172	92	314	327	330	334	341	346
Wyoming	177	73	224	221	231	232	234	241
Colorado	141	57	193	187	193	198	202	205
New Mexico	144	79	297	290	300	305	307	314
Arizona	165	89	318	320 2/	330	341	347	357
Utah	167	81	224	228	235	236	238	242
Nevada	135	66	190	194	198	201	205	208
Mountain	148	69	232	234	241	245	249	255
Washington	139	94	291	306	317	322	325	338
Oregon	129	73	230	242	249	252	254	259
California	167	98	322	345	356	361	370	382
Pacific	157	94	303	323	333	338	345	356
United States	173	82	232	247	253	258	262	258

1/ All farmlands with improvements as of March 1, except as indicated.

2/ Revised.

FARM PRODUCTION REGIONS



U. S. DEPARTMENT OF AGRICULTURE

NEG. 56(5)-2158 AGRICULTURAL RESEARCH SERVICE

UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON 25, D. C.

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE TO
AVOID PAYMENT OF POSTAGE $300

ARS 43-83-----------10/58----------5,500